

Investigating different types of EFL teacher questions as a formative assessment tool

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Abstract

This research article aimed to explore the types of questions deployed by EFL teachers as a formative assessment strategy. The participants in this case study were three Indonesian EFL teachers and twenty four students. It investigated how these teachers posed questions to benefit learning, and analyzed how students responded to represent their real thinking. The research methods used were classroom observations and interviews. The findings revealed two main points; (1) the vast majority (over 70%) of convergent questions were posed by the teachers, followed by less than 20% of divergent questions and procedural questions, (2) individual answer and choral answer made up the largest proportion (more than 40%), followed by a small minority (less than 10%) of no answer and teacher answer. The extent to which teacher questions benefited learning and in what way students answers represented their real thinking were also discussed. The implications of this study were to provide practical insight to EFL teachers into how to develop questions as a formative assessment strategy, and to inform EFL teachers with some suggestions to carry out effective questions to stimulate learners real thinking.

Keywords: teacher questions, students answers, EFL teachers, formative assessment

INTRODUCTION

Formative assessment is a term open to many different definition and interpretation. Assessment is formative when “evidences about student achievement is elicited, interpreted, and used by teachers, learners, or their peers, to make decisions about the next steps in instruction that are likely to be better, or better founded, than the decisions they would have taken in the absence of the evidence that was elicited” (Black and Wiliam, 2009). In this sense, the priority of formative assessment is clearly to promote learning and to improve instruction by focusing on the process of interpreting, eliciting, or using evidence. Additionally, Rea-Dickins (2001) argued that formative assessment “may be plotted at different points along a more formal to informal continuum”. As such, both formal teachers’ lesson plan and informal teachers’ questioning are considered as formative assessment.

In terms of teachers’ questioning, Wragg (2001) argued that teachers ask hundreds of questions every day, thousand in a single year, and more than a million during a

professional lifetime. Different types of questions are deployed by teachers to interact with their students. Richard and Lockart (1994) claimed three types of teachers' questions. First, convergent questions check students' knowledge by focusing on the content of information which had been presented previously, and on the information about the world not specified in the text. Second, divergent questions require higher cognitive skills because they were more challenging, linked the topic being discussed to the situations in real lives, and allowed students to express their ideas since there is no correct answer. Third, procedural questions relate to classroom routines and management.

Students' responses are another element which needs to analyze in formative assessment. Leung and Mohan (2004) argued that students' responses represent externalization of individual thought coded in language. Nevertheless, some linguists report that students' responses do not always represent their real thinking. For example, Tsui (1996) argued that no answer has been found to be a problem faced by most teachers. How much information can we get about students' thinking if they respond to teachers question with silence? Hu, et al (2004) talked about teachers answer their own questions. In this case, they argued it makes students to be more teacher-independent because excessive teachers' answers deprive opportunity for students to exhibit their real thinking. Chick (1996) discussed choral answer, where students replied to teachers' questions as a group or whole class. As such, choral answers limit the amount of information about individual students. To sum up, two research questions which form the focus of this study are outlined below:

1. What types of questions are posed by the teachers? Do they benefit learning?
2. What types of answers are delivered by the students? Do they represent students' real thinking?

METHODS

Participants

This study was conducted at Language Centre, University of Mataram. The participants were 3 Indonesian EFL teachers (T1, T2, and T3) and 24 students. Purposeful sampling helped select teachers' skill and knowledge, and maximum variation sampling helped identify teachers' educational backgrounds.

Data Collection

Classroom observations were carried out to collect the data regarding the teachers questioning practices. All the three teachers were observed for two sessions on a regular basis. Each session lasted for a hundred minutes, resulting in about two hundred minutes of data for each teacher. Video-recordings were also made to capture classroom interactions in each session.

Semi-structured interviews were conducted to explore participants' perceptions. Each interview lasted for about one hour, which yielded about nine hours interview data

(three individual teacher interviews and six representatives of student interviews). All participants were interviewed in the native language (Bahasa Indonesia) so as to facilitate natural communication.

Data Analysis

The two research questions guided the collection and analysis of data. All of the observations and interviews were firstly transcribed. They were then coded and analyzed on four separate occasions to ensure the consistency of the identified codes. After that they were compared with another data (observation notes) to check the similarities. This data triangulation was applied as a technique to obtain the validity of evaluation and findings (Matison, 1988).

FINDINGS

What types of questions are posed by the teachers? Do they benefit learning?

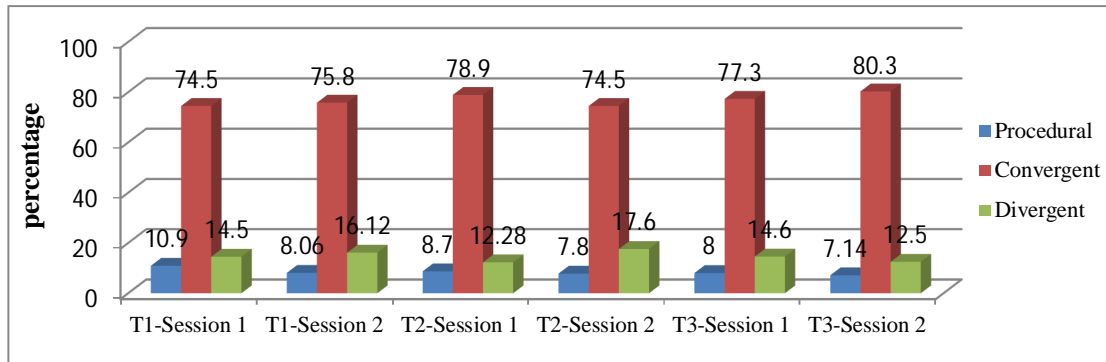
The following table shows the number of each question posed by the teachers in each session.

Table 1. Types of teachers' questions

Types of questions	Teacher						Total
	T1		T2		T3		
	S1	S2	S1	S2	S1	S2	
Procedural	6	5	5	4	6	4	30
Convergent	41	47	45	38	58	45	274
Divergent	8	10	7	9	11	7	52
Total	55	62	57	51	75	56	356

Note: T= teacher, S=session

As can be seen from the table above, convergent questions were the most frequent question (274) posed by the teacher, followed by divergent question (52) and procedural question (30). The rank of questions in percentage is shown by this following bar chart.



As indicated by the chart above, it is clear that over 70% of convergent questions were posed by the teacher in each session. Meanwhile, divergent questions were asked by less than 20% in each session. On the other hand, a small minority (under 10%) were procedural questions posed by the teacher in each session, except in S1 where they accounted for 10.9 %.

What types of answers are delivered by the students? Do they represent students' thinking?

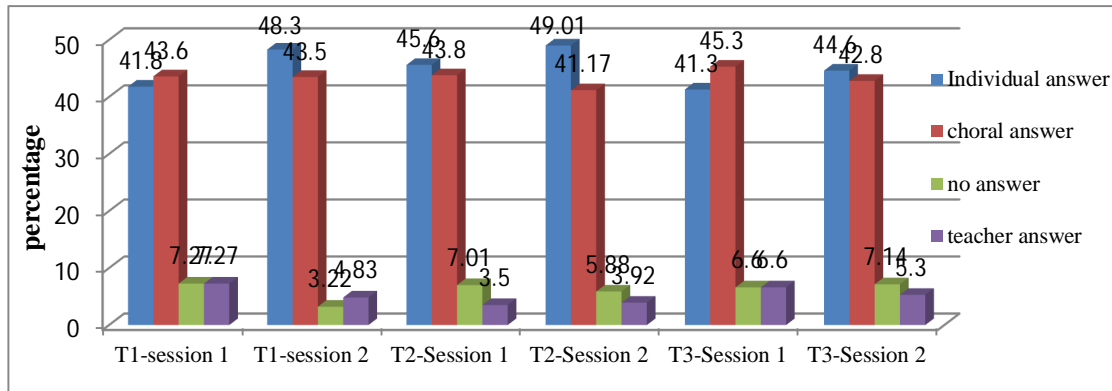
The following table shows the number of each answer given by students in each session.

Table 2. Types of students' answers

Types of students' answers	Teacher						Total
	T1		T2		T3		
	S1	S2	S1	S2	S1	S2	
Individual answer	23	30	26	25	31	25	160
Choral answer	24	27	25	21	34	24	155
No answer	4	2	4	3	5	4	22
Teacher answer	4	3	2	2	5	3	19
Total	55	62	57	51	75	56	356

Note: T= teacher, S=session

As shown by the table above, the two types of questions, individual answer (160) and choral answer (155) were the dominant types of answers given by students. In contrast, the other two, no answer (22) and teacher answer (19) were less popular. The percentage of each type of answers is shown by the bar chart below.



The chart above shows that the first two types of answers, individual answer and choral answer made up the largest proportion (more than 40%) in each session. Contrary, a small proportion (under 10%) was contributed by the other two types of answers, no answer and teacher answer.

DISCUSSION

Being the most frequently asked by the three teachers, convergent questions seemed to benefit learning. In this case, convergent questions generally checked students' knowledge by focusing on two points. First, it focused on the content of information which had been presented previously. For example, the question of "Niagara Falls is formed by three waterfalls, what are they?" was asked after students had read a text about Niagara Falls (T3 - Session 1). This question assessed students' mastery of the text because the answers could be easily found in the text provided. The second focus is on world knowledge. For example, the question "What happened in Aceh?" was asked when students were about to learn about natural disaster (T1 - Session 2). This question assessed students' background information about the world because the answers were not specified in the text. The students seemed to be aware of the functions of convergent questions. As two students responded:

S1: I think text-oriented questions are necessary because they require factual recall where we can easily find the answers in the text.

S2: I believe that world-knowledge questions are important. These types of questions seem to raise our awareness about the phenomenon happened in the world.

In the case of world-knowledge questions, T1 stated:

T1: All of my students usually tend to focus on the information provided in the text. Asking world-knowledge questions is an effective way to cultivate their insight.

These findings indicated that convergent questions functioned as an assessment tool to ensure whether students had mastered the topic. Thus, these types of questions facilitated for future learning. Rather than confining students' ideas to the text, world knowledge questions in particular explored their knowledge beyond the text. As such, convergent questions benefited learning.

Divergent questions, on the other hand, shared some characteristics. First, they were more challenging. It required higher cognitive skills. For example, the question "What have you learned from our discussion today?" was asked at the end of the class (T1 – session 2). This question required students to recall and identify some criteria to evaluate it. Second, divergent questions linked the topic to the situations in real lives. For example, the question "What do you know about ecotourism? Have you visited an ecotourism destination near your place?" was asked after students had learned about environment (T2 – session 1). This question tried to connect what have been learned in class to what students experienced off class. Third, divergent questions allowed students to express their ideas. For example, the question "What do you think of the death penalty for drugs dealers?" was asked after students had learned about criminal actions (T3 – session 2). This question provided students opportunities to express their own opinion. Students seemed to support the divergent questions posed by the teachers. As two students commented:

S3: Divergent questions allow me to think actively and critically. In addition, I prefer these questions because there is no correct answer. I can give any comments or opinions.

S4: I like divergent questions because they provide me with opportunities to express my thought. This helps teachers know what I am thinking.

These finding indicated that divergent questions benefited learning for three reasons; (1) they engage students in deep and critical thinking, (2) they allow students to articulate their opinion because there is no correct answers, and (3) they relate the topic in class to the situation in real lives.

In the case of the types of answers given by students, it is clear that individual answer and choral answer made up the largest proportion. Regarding these two types of answers, students commented:

S5: I think that individual answer is more effective because it requires me to prepare my own answers and engages me to be more active in the question-answer interaction.

S6: I prefer choral answer because I sometimes don't know the answer. I just follow what my peers say.

When asked his opinion regarding these two types of questions, T2 said:

T2: Rather than allowing a group of students to answer, I usually nominate one individual student to answer because I can ensure that what he is saying reflects his own thinking.

These findings indicated that individual answers were more effective as they appeared to reflect students' real thinking rather than choral answers. In terms of the other two types of questions (no answer and teacher answer), the interview data showed that most of unanswered questions were divergent. Students commented:

S7: I don't answer because I simply don't know the answer. I mean, the questions are sometimes too challenging where we have to analyze a happening issue.

S8: Sometimes, I find it is difficult to give opinion. I know there is no correct answer, but I sometimes have no idea about the issue being discussed.

When asked his opinion about these two types of question, T1 claimed that a lack of knowledge was the most likely reason which leads to silence.

T1: I believe that my students don't respond because they have a little knowledge about the issue being raised. Therefore, I sometimes answer my own questions.

These findings indicated that divergent questions mostly led to no response. The main reason for that was the limitation of students' knowledge.

CONCLUSION

This present study analyzed types of teachers questions from formative assessment perspective. The results found that convergent question was the most frequently asked (over 70%) by the three teachers, followed by divergent question (under 20%) and procedural question (under 11%). In this case, convergent questions and divergent questions appeared to benefit learning. In terms of students' answers, individual answer and choral answer made up the vast majority (over 40%). Based on the data found, individual answers appeared to reflect students' real thinking rather than choral answers. Meanwhile, divergent questions seemed to lead to silence. It was found that the most likely reason for these unanswered questions was the limitation of students' knowledge.

Several limitations occurred in this current study such as small sample of data and participants. Nonetheless, this study appeared to provide practical insight to EFL teachers into how to develop questions as a formative assessment strategy, and to inform EFL teachers with some suggestions to carry out effective questions to stimulate learners' real thinking.

REFERENCES

- Black, P., & Wiliam, D. (2009). Developing the theory of formative assessment. *Educational Assessment, Evaluation and Accountability*, 21(1): 5–31.
- Chick, J. (1996). Safe-talk: collusion in apartheid education. In: Coleman H (ed.) *Society and the Language Classroom*. Cambridge: Cambridge University Press
- Hu, Q., Nicholson, A., & Chen, W. (2004). A survey on the questioning pattern of college English teachers. *Foreign Language World*, 6: 22–27.
- Leung, C., & Mohan, B. (2004). Teacher formative assessment and talk in classroom context: assessment as discourse and assessment of discourse. *Language Testing*, 21(3): 335–59.
- Mathison, S. (1988). Why triangulate? *Educational Researcher*, 17(2), 13–17.
- Rea-Dickins, P. (2001). Mirror, mirror on the wall: identifying processes of classroom assessment. *Language Testing*, 18(4): 429–62.
- Richards, J.C., & Lockhart, C. (1994). *Reflective Teaching in Second Language Classrooms*. New York: Cambridge University Press.
- Tsui, A. (1996). Reticence and anxiety in second language learning. In: Bailey K, Nunan D (eds.) *Voices from the Language Classrooms: Qualitative Research in Second Language Education*. Cambridge: Cambridge University Press
- Wragg, E. C. (2001). *Questioning in the Secondary School*. London: Routledge